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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,084	11/13/2003	Nicholas James Witchey	021404.0012US1	7909
34284	7590	12/29/2010		
Rutan & Tucker, LLP. 611 ANTON BLVD SUITE 1400 COSTA MESA, CA 92626			EXAMINER DINH, KHANH Q	
			ART UNIT 2451	PAPER NUMBER
			MAIL DATE 12/29/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/712,084	<b>Applicant(s)</b> WITCHEY, NICHOLAS JAMES	
	<b>Examiner</b> Khanh Q. Dinh	<b>Art Unit</b> 2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. Reopening of Prosecution After Appeal Brief or Reply Brief

In view of the Appeal Brief filed on 10/20/2010, PROSECUTION IS  
HEREBY REOPENED. The Office Action sets forth below.

To avoid abandonment of the application, appellant must exercise one of  
the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a  
reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31  
followed by an appeal brief under 37 CFR 41.37. The previously paid  
notice of appeal fee and appeal brief fee can be applied to the new  
appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been  
increased since they were previously paid, then appellant must pay the  
difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening  
prosecution by signing below.

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2451

1. Claims 1-11 are presented for examination.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hovel et al., US Pat. No.7,116,681 in view of Brunton. US pat no.7,010,607.

As to claim 1, Hovel discloses a communication protocol converter comprising:

(a) a first modular communication jack having: a housing defining an open cavity and a segregated interior chamber, a connector port having a plurality of electrical contacts positioned within said open cavity, at least one circuit board incorporating Ethernet to raw data conversion circuitry components for a first communication protocol disposed

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within said interior chamber in electrical communication with the electrical contacts of said connector port; wherein the circuitry components are positioned on both sides of the at least one circuit board (ports connecting 62(A, B) and 72(A, B) of fig.2, see fig.2, col.8 line 10 to col.9 line 20); and iv) a memory positioned on said circuit board in electrical communication with said conversion circuitry for a first communication protocol for receiving converted data (using network controller to process data conversion, see figs.1, 2, col.6 line 13 to col.7 line 50); whereby the memory is interconnected to a bi-directional data line that allows the input and output of raw data (writing and accessing data from/to the storage (68A fig.2), see col.8 line 10 to col.9 line 20) (b) a second modular communication jack having: i) a housing defining an open cavity and a segregated interior chamber; ii) a connector port having a plurality of electrical contacts positioned within said open cavity; iii) at least one circuit board incorporating Ethernet to raw data conversion circuitry components for a second communication protocol disposed within said interior chamber in electrical communication with the electrical contacts of said connector port; a memory positioned on said circuit board in electrical communication with said conversion circuitry for said second communication protocol for receiving converted data (see fig.2, col.7 line 17 to col.8 line 58) wherein the memory is connected with the bi-directional line to receive input of raw data from the first modular communication jack; and (c) a bidirectional data interface electrically interconnecting said memory of said first communication jack with said memory of said second communication jack (processing data in/out of the storage, see col.8 lines 10-58).

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Hovel does not specifically disclose a controller block in the form of a microprocessor which handles all the conversion between raw data and Ethernet, including processing of digital and analog signals, as well as all of the required code protocol translations, said microprocessor utilizing embedded software to manipulate the data signal to provide data to magnetics and the memory for storing data utilized by a controller block and to communicate with Ethernet through Ethernet interface. However, Brunton discloses a controller block in the form of a microprocessor which handles all the conversion between raw data and Ethernet, including processing of digital and analog signals, as well as all of the required code protocol translations, said microprocessor utilizing embedded software to manipulate the data signal to provide data to magnetics and the memory for storing data utilized by a controller block and to communicate with Ethernet through Ethernet interface for storing data that utilized by a controller block (performing data protocol conversions from IPV4 to IPV6, analog and digital data and controlling Ethernet interfaces, see abstract, col.95 lines 4-56 and col.97 lines 9-61). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Bruntons' teachings into the Hovel's converter to process data information because it would have provided a handshaking across the locked link to indicate readiness for data transmission in a communication network.

As to claim 2, Hovel discloses said first communication protocol is Internet protocol version 4 and said second communication protocol is Internet protocol version 6 (see col.8 lines 10-58).

As to claim 3, Hovel discloses said first communication protocol is Internet protocol version 6 and said second communication protocol is Internet protocol version 4 (see fig.1, col.8 lines 10-58).

As to claim 4, Hovel discloses said conversion circuitry components of said first and second modular communications jacks includes magnetic circuitry and controller circuitry (see col.9 line 20 to col.10 line 50).

As to claim 5, Hovel discloses said conversion circuitry components includes LED circuitry (see col.9 line 20 to col.10 line 50).

As to claim 6, Hovel discloses said circuit boards each define first and second opposed sides and said conversion circuitry components are positioned on both first and second sides of said circuit boards (see col.7 line 8 to col.8 line 59 col.9 line 20 to col.10 line 50).

As to claim 7, Hovel discloses a communication protocol converter comprising:  
a housing defining first and second open cavities and a segregated interior chamber;  
each of said open cavities incorporating a plurality of electrical contacts positioned within said open cavities to form first and second connector ports wherein said first connector port is adapted to interface with a first communication protocol and said

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second connector port is adapted to interface with a second communication protocol (using network controller to process data conversion, see figs.1, 2, col.6 line 13 to col.7 line 50); and at least one circuit board incorporating communication protocol conversion circuitry components disposed within said interior chamber in electrical communication with the electrical contacts of said first and second connector ports wherein said conversion circuitry bi-directionally translates communication protocols (network protocol translation, see fig.2, col.7 line 17 to col.8 line 58), wherein the housing allows for the at least one circuit board to electronically communicate with both the first connector port and the second connector port and a microprocessor employing embedded software that converts Ethernet data from internet protocol version 4 to internet protocol version 6 (converting data from IPV4 to IPV6, see fig.2, col.7 line 17 to col.8 line 58).

Hovel does not specifically disclose a microprocessor to receive Internet protocol 4 Ethernet data, removes the Internet protocol 4 header data, inserts Internet protocol 6 header data, recalculates the necessary Internet protocol header fields and outputs corresponding Internet protocol 6 Ethernet data and a embedded software located on flash memory which is utilized by the microprocessor to perform its functions. However, Hiles discloses a microprocessor receive Internet protocol 4 Ethernet data, removes the Internet protocol 4 header data, inserts Internet protocol 6 header data, recalculates the necessary Internet protocol header fields and outputs corresponding Internet protocol 6 Ethernet data and a embedded software located on flash memory which is utilized by the microprocessor to perform its functions (using the router for examining the local



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route header's "next header" field to determine the associated addressing protocol such as IPV4 and IPV6. Then the router removes the local route header (nominally via pointer manipulation) and parses the next header to extract the associated protocol's destination addresses, col.39 line 25 to col.40 line 40 and col.95 lines 4-56). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to implement Bruntons' teachings into the Hovel's converter to process data information because it would have provided faster time-to-market for a complete future I/O tool chain solution in a communication network.

As to claim 8, Hovel discloses said protocol conversion circuitry comprises, a microprocessor incorporating embedded software for converting a first communication protocol received at said first connector port to a second communication protocol output to said second connector port (processing protocol translations, see fig.2, col.8 lines 10-58).

As to claim 9, Hovel discloses said microprocessor converts a second communication received at said second connector port to a first communication protocol output to said first connector port (see col.7 line 8 to col.8 line 59 col.9 line 20 to col.10 line 50).

As to claim 10, Hovel discloses said first communication protocol is Internet protocol version 4 and said second communication protocol is Internet protocol version 6 (see fig.1, col.8 lines 10-58).

As to claim 11, Hovel discloses said first communication protocol is Internet protocol version 6 and said second communication protocol is Internet protocol version 4 (see fig.1, col.8 lines 10-58).

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

### **Conclusion**

5. Claims 1-11 are rejected.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (571) 272-3936. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FOLLANSBEE JOHN, can be reached on (571) 272-3964. The fax phone number for this group is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**

Commissioner for patents

P O Box 1450

Alexandria, VA 22313-1450

/Khanh Dinh/

Primary Examiner, Art Unit 2451